

**REMARKS**

Claims 1-30 are pending in this application.

**I. Allowable Subject Matter**

The Office Action indicates that claims 8-10, 23, 24 and 27 contain allowable subject matter and would be allowable if rewritten in independent including all of the features of the base claim and any intervening claims. Applicant appreciates this indication of allowability and submits that all pending claims are allowable.

**II. §102(b) Rejection of Claims 1, 6, 7, 11-19, 22, 26 and 30**

The Office Action rejects claims 1, 6, 7, 11-19, 22, 26 and 30 under 35 U.S.C. §102(b) over Macks, U.S. Patent No. 2,964,339. The rejection is respectfully traversed.

Macks fails to disclose or suggest the claim 1 resilient element that resists both radial and axial forces acting on the sealing member. The Office Action contains numerous factual errors and makes unsupported assertions regarding the disclosure of Macks. The Office Action alleges that Macks' structure has attributes that are the opposite of what Macks explicitly discloses. The Office Action fails to meet its burden of establishing a *prima facie* case of anticipation.

Macks discloses a plurality of tension members 64 disposed around a ring 60 and affixed between a housing 12 and the ring 60 (Fig. 9; col. 6, lines 58-60). The tension members 64 prevent movement axially of the ring 60 (see col. 6, lines 60-62, which state that the tension members 64 have "the purpose of restraining the ring 60 against movement which would be caused by the pressure differential across the ring"). Macks explicitly teaches that the tension members 64 do "not restrain the ring 60 against movement in the radial direction" (col. 6, lines 64 and 65, emphasis added). Thus, Macks clearly teaches that the tension members 64 do not resist radial forces acting on the sealing member.

However, contrary to the explicit disclosure of Macks, the Office Action continues to assert that tension members 64 resist radial forces acting on the sealing member. In support of its assertion, the Office Action uses groundless interpretations of some of Macks technical features and imbues them with properties that are not taught by Macks. (In fact, as explained above, the Office Action alleges that the tension members 64 have attributes that Macks explicitly teaches they do not have.) The Office Action cannot ignore the explicit disclosure of Macks. To do so is clear error and grounds for reversal.

First, the Office Action alleges that the tension members 64 or the thin flexible sleeve 80 are resilient elements. However, nowhere does Macks explain, discuss or suggest that the tension members 64 or the thin flexible sleeve 80 are resilient. Like the tension members 64, the thin flexible sleeve 80 (Fig. 11) serves to restrain the ring 66 against axial movement (col. 7, lines 20-22), but not radial forces acting on the sealing member. Nowhere does Macks explain, discuss or suggest that the tension members 64 or thin flexible sleeve 80 are resilient elements that resist radial forces acting on the sealing member.

Second, the Office Action in paragraph 8 supports its allegation that the tension members 64 are resilient by asserting that the tension members 64 are "rods", and that "the rods of Macks are metal". Macks does not teach that the tension members are rods. Macks explicitly discloses that the tension members 64 "may take the form of wire, chains, or similar devices" (col. 6, lines 63 and 64, emphasis added). Wire, chains or similar devices are articles that are effective in tension (to reduce axial forces), but offer no radial resistance. For instance, a wire would offer no radial resistance to the forces that the sealing ring 66 will experience. The term "rod" is highly suggestive of physical properties that are not taught by Macks to be provided by the tension members 64. Thus, the Office Action's assertion that a "rod" would fulfill the function of the claimed resilient element is misplaced and irrelevant. Moreover, the Office Action's assertion that tension members 64 are metal rods is not true.

Finally, the Office Action on page 5 asserts that "the rods are flexible" and that flexible material has an inherent resistance that would resist radial forces acting on the sealing member. Macks discloses that wires 74 (allegedly corresponding to the claimed resilient element) function to carry the load imposed on the ring 66 in the axial direction (col. 7, lines 6-8). Macks further discloses that the wires 74 may be of any type of flexible tension material (col. 7, lines 8-10). Applicant respectfully disagrees with the Office Action that the wires 74 have an inherent resistance, especially an inherent resistance to resist radial forces in the sealing member of Macks. For example, string and fishing line are both flexible, but do not have any resistance to the extent that would be useful to resist radial forces in the sealing member of Mack.

Thus, Macks fails to disclose or suggest the claim 1 resilient element that resists both radial and axial forces acting on the sealing member. Therefore, claim 1 is patentable over Macks. Because claims 6, 7, 11-19, 22, 26 and 30 incorporate the features of claim 1, these claims also are patentable over Macks. Thus, it is respectfully requested that the rejection be withdrawn.

### **III. §103(a) Rejections of Claims 2-5, 20, 21, 25, 28 and 29**

The Office Action rejects claims 2-5, 28 and 29 under 35 U.S.C. §103(a) over Macks in view of Gardner, U.S. Patent No. 5,632,493; rejects claims 20 and 21 under 35 U.S.C. §103(a) over Macks in view of Strub, U.S. Patent No. 3,756,673; and rejects claim 25 under 35 U.S.C. §103(a) over Macks. The rejections are respectfully traversed.

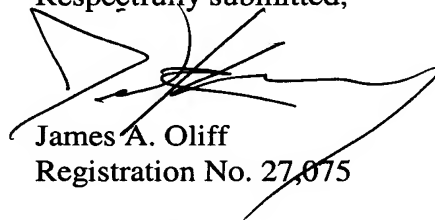
Neither Gardner nor Strub overcomes the deficiencies of Macks with respect to claim 1. Thus, claims 2-5, 20, 21, 25, 28 and 29, which incorporate the features of claim 1, are patentable over the combinations of applied references. Thus, it is respectfully requested that the rejections be withdrawn.

**IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'James A. Oliff', written over a horizontal line.

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